

(FILE 'HOME' ENTERED AT 19:53:31 ON 18 JUN 2002)

FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,  
USPATFULL, JAPIO' ENTERED AT 19:53:43 ON 18 JUN 2002

L1	407 S CBPA
L2	66571 S STREPTOCOCCUS PNEUMONIAE
L3	79 S L1 AND L2
L4	31 DUP REM L3 (48 DUPLICATES REMOVED)
L5	242710 S POLYSACCHARIDE
L6	7339 S L2 AND L5
L7	10 S L6 AND L4
L8	10 DUP REM L7 (0 DUPLICATES REMOVED)

L8 ANSWER 1 OF 10 USPATFULL  
AN 2002:78228 USPATFULL  
TI IDENTIFICATION AND CHARACTERIZATION OF NOVEL PNEUMOCOCCAL CHOLINE  
BINDING PROTEIN, CBPG, AND DIAGNOSTIC AND THERAPEUTIC USES THEREOF  
IN TUOMANEN, ELAINE I., GERMANTOWN, TN, UNITED STATES  
GOSINK, KHOOSHEH, CORDOVA, TN, UNITED STATES  
MASURE, ROBERT, GERMANTOWN, TN, UNITED STATES  
PI US 2002041881 A1 20020411  
AI US 1999-287070 A1 19990406 (9)  
RLI Continuation-in-part of Ser. No. US 1998-196389, filed on 19 Nov 1998,  
ABANDONED  
DT Utility  
FS APPLICATION  
LREP DAVID A JACKSON ESQ, KLAUBER & JACKSON, 411 HACKENSACK AVENUE,  
HACKENSACK, NJ, 07601  
CLMN Number of Claims: 41  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Page(s)  
LN.CNT 2806

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides isolated polypeptides comprising an amino acid sequence of a choline binding protein CbpG. This invention provides an isolated polypeptide comprising an amino acid sequence of a choline binding polypeptide CbpG or N-terminal CbpG truncate, including analogs, variants, mutants, derivatives and fragments thereof. This invention further provides an isolated immunogenic polypeptide comprising an amino acid sequence of a choline binding protein CbpG. This invention provides an isolated nucleic acid encoding a polypeptide comprising an amino acid sequence of a choline binding protein CbpG. This invention provides pharmaceutical compositions, vaccines, and diagnostic and therapeutic methods of use of the isolated polypeptides and nucleic acids. Assays for compounds which alter or inactivate the polypeptides of the present invention for use in therapy are also provided.

L8 ANSWER 2 OF 10 USPATFULL  
AN 2002:55159 USPATFULL  
TI **STREPTOCOCCUS PNEUMONIAE** POLYNUCLEOTIDES AND SEQUENCES  
IN KUNSCH, CHARLES A., GAITHERSBURG, MD, UNITED STATES  
CHOI, GIL H., ROCKVILLE, MD, UNITED STATES  
DILLON, PATRICK J., CARLSBAD, CA, UNITED STATES  
ROSEN, CRAIG A., LAYTONSVILLE, MD, UNITED STATES  
BARASH, STEVEN C., ROCKVILLE, MD, UNITED STATES  
FANNON, MICHAEL R., SILVER SPRING, MD, UNITED STATES  
DOUGHERTY, BRIAN A., MT. AIRY, MD, UNITED STATES  
PI US 2002032323 A1 20020314  
AI US 1997-961527 A1 19971030 (8)  
PRAI US 1996-29960P 19961031 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 7752

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides polynucleotide sequences of the genome of **Streptococcus pneumoniae**, polypeptide sequences encoded by the polynucleotide sequences, corresponding polynucleotides and polypeptides, vectors and hosts comprising the polynucleotides, and assays and other uses thereof. The present invention further provides polynucleotide and polypeptide sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use.

L8 ANSWER 3 OF 10 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.  
 AN 2002100197 EMBASE  
 TI [Virulence factors of **Streptococcus pneumoniae**].  
 LES FACTEURS DE VIRULENCE DE **STREPTOCOCCUS PNEUMONIAe**.  
 AU Rieux V.  
 CS Dr. V. Rieux, 3, rue du Jambon, 93200 Saint-Denis, France.  
 vero.rioux@free.fr  
 SO Medecine et Maladies Infectieuses, (2002) 32/SUPPL. 1 (1-12).  
 Refs: 100  
 ISSN: 0399-077X CODEN: MMAIB5  
 CY France  
 DT Journal; Conference Article  
 FS 004 Microbiology  
 005 General Pathology and Pathological Anatomy  
 LA French  
 SL English; French  
 AB **Streptococcus pneumoniae** colonizes the nasopharynx and remains a major human pathogen despite antibiotic therapy. Pneumococci cause important diseases including pneumonia, bacteremia, meningitis and otitis media. Many pneumococcal virulence factors contribute to the pathogenesis. On the one hand, capsular **polysaccharides**, PspA, and PspC enable pneumococci to escape host defenses. On the other hand, after the lysis induced by LytA, pneumolysin, teichoic acids, lipoteichoic acids and phosphocholine induce inflammatory reactions which are often deleterious for the host. Others factors as **CbpA**, neuraminidases, PsaA... participate in adherence, colonization and in the first steps of the infection. A better knowledge of pneumococcal pathogenesis and virulence factors will contribute to the development of new drugs or vaccines. .COPYRGT. 2002 Editions scientifiques et medicales Elsevier SAS.

L8 ANSWER 4 OF 10 USPATFULL  
 AN 2001:139158 USPATFULL  
 TI Pneumococcal surface protein C (PspC), epitopic regions and strain selection thereof, and uses therefor  
 IN Briles, David E., Birmingham, AL, United States  
 Hollingshead, Susan K., Birmingham, AL, United States  
 Brooks-Walter, Alexis, Birmingham, AL, United States  
 PI US 2001016200 A1 20010823  
 AI US 2000-748875 A1 20001226 (9)  
 RLI Division of Ser. No. US 1999-298523, filed on 23 Apr 1999, PENDING  
 PRAI US 1998-82728P 19980423 (60)  
 DT Utility  
 FS APPLICATION  
 LREP FROMMER LAWRENCE & HAUG, 745 FIFTH AVENUE, NEW YORK, NY, 10151  
 CLMN Number of Claims: 27  
 ECL Exemplary Claim: 1  
 DRWN 50 Drawing Page(s)  
 LN.CNT 1911  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Disclosed and claimed are: epitopic regions of Pneumococcal Surface Protein C or "PspC", different clades of PspC, isolated and/or purified nucleic acid molecules such as DNA encoding a fragment or portion of PspC such as an epitopic region of PspC or at least one epitope of PspC, uses for such nucleic acid molecules, e.g., to detect the presence of PspC or of *S. pneumoniae* by detecting a nucleic acid molecule therefor in a sample such as by amplification and/or a polymerase chain reaction, vectors or plasmids which contain and/or express such nucleic acid molecules, e.g., in vitro or in vivo, immunological, immunogenic or vaccine compositions including at least one PspC and/or a portion thereof (such as at least one epitopic region of at least one PspC and/or at least one polypeptide encoding at least one epitope of at least one PspC), either alone or in further combination with at least

one second pneumococcal antigen, such as at least one different PspC and/or a fragment thereof and/or at least one PspA and/or at least one epitopic region of at least one PspA and/or at least one polypeptide including at least one epitope of PspA. PspC or a fragment thereof, and thus a composition including PspC or a fragment thereof, can be administered by the same routes, and in approximately the same amounts, as PspA. Thus, the invention further provides methods for administering PspC or a fragment thereof, as well as uses of PspC or a fragment thereof to formulate such compositions.

L8 ANSWER 5 OF 10 USPATFULL  
AN 2001:86039, USPATFULL  
TI ~~Choline-binding proteins for anti-pneumococcal vaccines~~  
IN Masure, H. Robert, Germantown, TN, United States  
Rosenow, Carsten I., New York, NY, United States  
Tuomanen, Elaine, Germantown, TN, United States  
Wizemann, Theresa M., Germantown, MD, United States  
PA The Rockefeller University, New York, NY, United States (U.S. corporation)  
PI ~~US 6245335~~ B1 20010612  
AI US 1997-847065 19970501 (8)  
PRAI US 1996-16632P 19960501 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Mosher, Mary E.  
LREP Klauber & Jackson  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 25 Drawing Figure(s); 18 Drawing Page(s)  
LN.CNT 2933

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to bacterial choline binding proteins (CBPs) which bind choline. Such proteins are particularly desirable for vaccines against appropriate strains of Gram positive bacteria, particularly streptococcus, and more particularly pneumococcus. Also provided are DNA sequences encoding the bacterial choline binding proteins or fragment thereof, antibodies to the bacterial choline binding proteins, pharmaceutical compositions comprising the bacterial choline binding proteins, antibodies to the bacterial choline binding proteins suitable for use in passive immunization, and small molecule inhibitors of choline binding protein mediated adhesion. Methods for diagnosing the presence of the bacterial choline binding protein, or of the bacteria, are also provided. In a specific embodiment, a streptococcal choline binding protein is an enolase, which demonstrates strong affinity for fibronectin.

L8 ANSWER 6 OF 10 MEDLINE  
AN 2001298975 MEDLINE  
DN 21275922 PubMed ID: 11381099  
TI Pneumococcal virulence factors: structure and function.  
AU Jedrzejask M J  
CS Department of Microbiology, University of Alabama at Birmingham, 933 19th Street South, Birmingham, AL 35294.. jedrzejask@uab.edu  
NC AI 44079 (NIAID)  
SO MICROBIOLOGY AND MOLECULAR BIOLOGY REVIEWS, (2001 Jun) 65 (2) 187-207 ; first page, table of contents. Ref: 167  
Journal code: 9706653. ISSN: 1092-2172.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)  
LA English  
FS Priority Journals  
EM 200107

ED Entered STN: 20010716  
Last Updated on STN: 20010716  
Entered Medline: 20010712

AB The overall goal for this review is to summarize the current body of knowledge about the structure and function of major known antigens of **Streptococcus pneumoniae**, a major gram-positive bacterial pathogen of humans. This information is then related to the role of these proteins in pneumococcal pathogenesis and in the development of new vaccines and/or other antimicrobial agents. *S. pneumoniae* is the most common cause of fatal community-acquired pneumonia in the elderly and is also one of the most common causes of middle ear infections and meningitis in children. The present vaccine for the pneumococcus consists of a mixture of 23 different capsular **polysaccharides**. While this vaccine is very effective in young adults, who are normally at low risk of serious disease, it is only about 60% effective in the elderly. In children younger than 2 years the vaccine is ineffective and is not recommended due to the inability of this age group to mount an antibody response to the pneumococcal **polysaccharides**. Antimicrobial drugs such as penicillin have diminished the risk from pneumococcal disease. Several pneumococcal proteins including pneumococcal surface proteins A and C, hyaluronate lyase, pneumolysin, autolysin, pneumococcal surface antigen A, choline binding protein A, and two neuraminidase enzymes are being investigated as potential vaccine or drug targets. Essentially all of these antigens have been or are being investigated on a structural level in addition to being characterized biochemically. Recently, three-dimensional structures for hyaluronate lyase and pneumococcal surface antigen A became available from X-ray crystallography determinations. Also, modeling studies based on biophysical measurements provided more information about the structures of pneumolysin and pneumococcal surface protein A. Structural and biochemical studies of these pneumococcal virulence factors have facilitated the development of novel antibiotics or protein antigen-based vaccines as an alternative to **polysaccharide**-based vaccines for the treatment of pneumococcal disease.

L8 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS  
AN 2000:688113 CAPLUS  
DN 133:265640  
TI Bacterial **polysaccharide** antigen vaccine  
IN Capiiau, Carine; Deschamps, Marguerite; Desmons, Pierre Michel; Laferriere, Craig Antony Joseph; Poolman, Jan; Prieels, Jean-paul  
PA Smithkline Beecham Biologicals S.A., Belg.  
SO PCT Int. Appl., 79 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000056360	A2	20000928	WO 2000-EP2468	20000317
	WO 2000056360	A3	20010125		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	EP 1163000	A2	20011219	EP 2000-912626	20000317
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	BR 2000009163	A	20011226	BR 2000-9163	20000317

NO 2001004325 A 20011114 NO 2001-4325 20010905  
 PRAI GB 1999-6437 A 19990319  
 GB 1999-9077 A 19990420  
 GB 1999-9466 A 19990423  
 GB 1999-16677 A 19990715  
 WO 2000-EP2468 W 20000317

AB The present invention relates to the field of bacterial **polysaccharide** antigen vaccines. In particular, the present invention relates to bacterial **polysaccharides** conjugated to protein D from H. influenzae.

L8 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS

AN 2000:688112 CAPLUS

DN 133:265639

TI Vaccine

IN Capiau, Carine; Deschamps, Marguerite; Desmons, Pierre Michel; Laferriere, Craig Antony Joseph; Poolman, Jan; Prieels, Jean-Paul

PA Smithkline Beecham Biologicals S.A., Belg.

SO PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000056359	A2	20000928	WO 2000-EP2467	20000317
	WO 2000056359	A3	20010201		
	W:		AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:		GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
	EP 1162999	A2	20011219	EP 2000-916983	20000317
	R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO		
	BR 2000009166	A	20011226	BR 2000-9166	20000317
	NO 2001004323	A	20011114	NO 2001-4323	20010905
PRAI	GB 1999-6437	A	19990319		
	GB 1999-9077	A	19990420		
	GB 1999-9466	A	19990423		
	GB 1999-16677	A	19990715		
	WO 2000-EP2467	W	20000317		

AB The present invention relates to the field of bacterial **polysaccharide** antigen vaccines. In particular, the present invention relates to vaccines comprising a pneumococcal **polysaccharide** antigen, typically a pneumococcal **polysaccharide** conjugate antigen, formulated with a protein antigen form **Streptococcus pneumoniae**, and optionally a Th1-inducing adjuvant.

L8 ANSWER 9 OF 10 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 2000:103727 BIOSIS

DN PREV200000103727

TI Additive attenuation of virulence of **Streptococcus pneumoniae** by mutation of the genes encoding pneumolysin and other putative pneumococcal virulence proteins.

AU Berry, Anne M.; Paton, James C. (1)

CS (1) Molecular Microbiology Unit, Women's and Children's Hospital, North Adelaide, SA, 5006 Australia

SO Infection and Immunity, (Jan., 2000) Vol. 68, No. 1, pp. 133-140.

ISSN: 0019-9567.

DT Article  
LA English  
SL English

AB Although the **polysaccharide** capsule of **Streptococcus pneumoniae** has been recognized as a sine qua non of virulence, much recent attention has focused on the role of pneumococcal proteins in pathogenesis, particularly in view of their potential as vaccine antigens. The individual contributions of pneumolysin (Ply), the major neuraminidase (NanA), autolysin (LytA), hyaluronidase (Hyl), pneumococcal surface protein A (PspA), and choline-binding protein A (CbpA) have been examined by specifically mutagenizing the respective genes in the pneumococcal chromosome and comparing the impact on virulence in a mouse intraperitoneal challenge model. Mutagenesis of either the ply, lytA, or pspA gene in *S. pneumoniae* D39 significantly reduced virulence, relative to that of the wild-type strain, indicating that the respective gene products contribute to pathogenesis. On the other hand, mutations in nanA, hyl, or cbpA had no significant impact. The virulence of D39 derivatives carrying a ply deletion mutation as well as an insertion-duplication mutation in one of the other genes was also examined. Mutagenesis of either nanA or lytA did not result in an additional attenuation of virulence in the ply deletion background. However, significant additive attenuation in virulence was observed for the strains with ply-hyl, ply-pspA, and ply-cbpA double mutations.

L8 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2002 ACS  
AN 1998:477757 CAPLUS  
DN 129:187695

TI Pneumococcal trafficking across the blood-brain barrier: molecular analysis of a novel bidirectional pathway  
AU Ring, Axel; Weiser, Jeffrey N.; Tuomanen, Elaine I.  
CS Department of Infectious Diseases, St. Jude Children's Research Hospital, Memphis, TN, 38105, USA

SO Journal of Clinical Investigation (1998), 102(2), 347-360  
CODEN: JCINAO; ISSN: 0021-9738

PB Rockefeller University Press

DT Journal  
LA English

AB Although **Streptococcus pneumoniae** is a major cause of meningitis in humans, the mechanisms underlying its traversal from the circulation across the blood-brain barrier (BBB) into the subarachnoid space are poorly understood. One mechanism might involve transcytosis through microvascular endothelial cells. In this study we investigated the ability of pneumococci to invade and transmigrate through monolayers of rat and human brain microvascular endothelial cells (BMEC). Significant variability was found in the invasive capacity of clin. isolates. Phase variation to the transparent phenotype increased invasion as much as 6-fold and loss of capsule .apprx.200-fold. Invasion of transparent pneumococci required choline in the pneumococcal cell wall, and invasion was partially inhibited by antagonists of the platelet-activating factor (PAF) receptor on the BMEC. Pneumococci that gained access to an intracellular vesicle from the apical side of the monolayer subsequently were subject to three fates. Most opaque variants were killed. In contrast, the transparent phase variants were able to transcytose to the basal surface of rat and human BMEC in a manner dependent on the PAF receptor and the presence of pneumococcal choline-binding protein A. The remaining transparent bacteria entering the cell underwent a previously unrecognized recycling to the apical surface. Transcytosis eventually becomes a dominating process accounting for up to 80% of intracellular bacteria. Our data suggest that interaction of pneumococci with the PAF receptor results in sorting so as to transcytose bacteria across the cell while non-PAF receptor entry shunts bacteria for exit and reentry on the apical surface in a novel

recycling pathway.

=>



(FILE 'HOME' ENTERED AT 19:53:31 ON 18 JUN 2002)

FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,  
USPATFULL, JAPIO' ENTERED AT 19:53:43 ON 18 JUN 2002

L1	407 S CBPA
L2	66571 S STREPTOCOCCUS PNEUMONIAE
L3	79 S L1 AND L2
L4	31 DUP REM L3 (48 DUPLICATES REMOVED)
L5	242710 S POLYSACCHARIDE
L6	7339 S L2 AND L5
L7	10 S L6 AND L4
L8	10 DUP REM L7 (0 DUPLICATES REMOVED)
L9	0 S CBPA AND STREPTOCOCCUS PNEUMONIAE POLYSACCHARIDE ANTIGEN
L10	35 S L1 AND (COMBINATION OR BIVALENT OR MULTIVALENT)
L11	30 DUP REM L10 (5 DUPLICATES REMOVED)

L11 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2002 ACS  
 AN 2002:220409 CAPLUS  
 DN 136:246389  
 TI Streptococcus pneumoniae vaccine comprising 2 or more proteins  
 IN Hermand, Philippe; Laferriere, Craig Antony Joseph; Lobet, Yves; Poolman, Jan  
 PA Smithkline Beecham Biologicals S.A., Belg.  
 SO PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002022168	A2	20020321	WO 2001-EP10570	20010912
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI GB 2000-22742 A 20000915

AB The present invention relates to a **combination** of 2 or more Streptococcus pneumoniae proteins, their manuf. and use in medicine as a vaccine. Such **combinations** are particularly useful for the protection of infants and elderly against streptococcal infection.

L11 ANSWER 2 OF 30 USPATFULL  
 AN 2002:78228 USPATFULL  
 TI IDENTIFICATION AND CHARACTERIZATION OF NOVEL PNEUMOCOCCAL CHOLINE BINDING PROTEIN, CBPG, AND DIAGNOSTIC AND THERAPEUTIC USES THEREOF  
 IN TUOMANEN, ELAINE I., GERMANTOWN, TN, UNITED STATES  
 GOSINK, KHOOSHEH, CORDOVA, TN, UNITED STATES  
 MASURE, ROBERT, GERMANTOWN, TN, UNITED STATES  
 PI US 2002041881 A1 20020411  
 AI US 1999-287070 A1 19990406 (9)  
 RLI Continuation-in-part of Ser. No. US 1998-196389, filed on 19 Nov 1998, ABANDONED  
 DT Utility  
 FS APPLICATION  
 LREP DAVID A JACKSON ESQ, KLAUBER & JACKSON, 411 HACKENSACK AVENUE, HACKENSACK, NJ, 07601  
 CLMN Number of Claims: 41  
 ECL Exemplary Claim: 1  
 DRWN 11 Drawing Page(s)  
 LN.CNT 2806

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides isolated polypeptides comprising an amino acid sequence of a choline binding protein CbpG. This invention provides an isolated polypeptide comprising an amino acid sequence of a choline binding polypeptide CbpG or N-terminal CbpG truncate, including analogs, variants, mutants, derivatives and fragments thereof. This invention further provides an isolated immunogenic polypeptide comprising an amino acid sequence of a choline binding protein CbpG. This invention provides an isolated nucleic acid encoding a polypeptide comprising an amino acid sequence of a choline binding protein CbpG. This invention provides pharmaceutical compositions, vaccines, and diagnostic and therapeutic methods of use of the isolated polypeptides and nucleic acids. Assays for compounds which alter or inactivate the polypeptides of the present invention for use in therapy are also provided.

L11 ANSWER 3 OF 30 USPATFULL

AN 2002:55159 USPATFULL  
TI STREPTOCOCCUS PNEUMONIAE POLYNUCLEOTIDES AND SEQUENCES  
IN KUNSCH, CHARLES A., GAITHERSBURG, MD, UNITED STATES  
CHOI, GIL H., ROCKVILLE, MD, UNITED STATES  
DILLON, PATRICK J., CARLSBAD, CA, UNITED STATES  
ROSEN, CRAIG A., LAYTONSVILLE, MD, UNITED STATES  
BARASH, STEVEN C., ROCKVILLE, MD, UNITED STATES  
FANNON, MICHAEL R., SILVER SPRING, MD, UNITED STATES  
DOUGHERTY, BRIAN A., MT. AIRY, MD, UNITED STATES  
PI US 2002032323 A1 20020314  
AI US 1997-961527 A1 19971030 (8)  
PRAI US 1996-29960P 19961031 (60)  
DT Utility  
FS APPLICATION  
LREP HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850  
CLMN Number of Claims: 20  
ECL Exemplary Claim: 1  
DRWN 2 Drawing Page(s)  
LN.CNT 7752

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides polynucleotide sequences of the genome of Streptococcus pneumoniae, polypeptide sequences encoded by the polynucleotide sequences, corresponding polynucleotides and polypeptides, vectors and hosts comprising the polynucleotides, and assays and other uses thereof. The present invention further provides polynucleotide and polypeptide sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use.

L11 ANSWER 4 OF 30 USPATFULL

AN 2001:205946 USPATFULL  
TI Use of PDE-4-specific inhibitors to reduce the severity of a bacterial infection after a respiratory viral infection  
IN DeMarsh, Peter L., West Chester, PA, United States  
Dillon, Susan B., Alamo, CA, United States  
Woodnutt, Gary, Chester Springs, PA, United States  
PI US 2001041739 A1 20011115  
AI US 2001-779401 A1 20010208 (9)  
PRAI US 2000-181385P 20000209 (60)  
DT Utility  
FS APPLICATION  
LREP GLAXOSMITHKLINE, Corporate Intellectual Property - UW2220, P.O. Box 1539, King of Prussia, PA, 19406-0939  
CLMN Number of Claims: 10  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Page(s)  
LN.CNT 463

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to a method for the prophylaxis of or reducing the severity of post-viral bacterial infection by administering a PDE 4-specific inhibitor prior to or during the course of a viral infection or thereafter during the course of the bacterial infection.

L11 ANSWER 5 OF 30 USPATFULL

AN 2001:139158 USPATFULL  
TI Pneumococcal surface protein C (PspC), epitopic regions and strain selection thereof, and uses therefor  
IN Briles, David E., Birmingham, AL, United States  
Hollingshead, Susan K., Birmingham, AL, United States  
Brooks-Walter, Alexis, Birmingham, AL, United States  
PI US 2001016200 A1 20010823  
AI US 2000-748875 A1 20001226 (9)  
RLI Division of Ser. No. US 1999-298523, filed on 23 Apr 1999, PENDING

PRAI US 1998-82728P 19980423 (60)  
DT Utility  
FS APPLICATION  
LREP FROMMER LAWRENCE & HAUG, 745 FIFTH AVENUE, NEW YORK, NY, 10151  
CLMN Number of Claims: 27  
ECL Exemplary Claim: 1  
DRWN 50 Drawing Page(s)  
LN.CNT 1911

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed and claimed are: epitopic regions of Pneumococcal Surface Protein C or "PspC", different clades of PspC, isolated and/or purified nucleic acid molecules such as DNA encoding a fragment or portion of PspC such as an epitopic region of PspC or at least one epitope of PspC, uses for such nucleic acid molecules, e.g., to detect the presence of PspC or of *S. pneumoniae* by detecting a nucleic acid molecule therefor in a sample such as by amplification and/or a polymerase chain reaction, vectors or plasmids which contain and/or express such nucleic acid molecules, e.g., in vitro or in vivo, immunological, immunogenic or vaccine compositions including at least one PspC and/or a portion thereof (such as at least one epitopic region of at least one PspC and/or at least one polypeptide encoding at least one epitope of at least one PspC), either alone or in further **combination** with at least one second pneumococcal antigen, such as at least one different PspC and/or a fragment thereof and/or at least one PspA and/or at least one epitopic region of at least one PspA and/or at least one polypeptide including at least one epitope of PspA. PspC or a fragment thereof, and thus a composition including PspC or a fragment thereof, can be administered by the same routes, and in approximately the same amounts, as PspA. Thus, the invention further provides methods for administering PspC or a fragment thereof, as well as uses of PspC or a fragment thereof to formulate such compositions.

L11 ANSWER 6 OF 30 USPATFULL

AN 2001:231163 USPATFULL

TI Process of expressing and isolating recombinant proteins and recombinant protein products from plants, plant derived tissues or cultured plant cells

IN Shani, Ziv, Rehovot, Israel  
Shoseyov, Oded, Karme Yosef, Israel

PA CBD Technologies Ltd., Rehovot, Israel (non-U.S. corporation)  
Yissum Research and Development Company of the Hebrew University of Jerusalem, Jerusalem, Israel (non-U.S. corporation)

PI US 6331416 B1 20011218

AI US 1999-329234 19990610 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Campbell, Bruce R.; Assistant Examiner: Woitach, Joseph T.

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 1884

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process of expressing a recombinant protein in a plant and of isolating the recombinant protein from the plant, the process is effected by (a) providing a plant, a plant derived tissue or cultured plant cells expressing a fusion protein including the recombinant protein and a cellulose binding peptide being fused thereto, the fusion protein being compartmentalized within cells of the plant, plant derived tissue or cultured plant cells, so as to be sequestered from cell walls of the cells of the plant, plant derived tissue or cultured plant cells; (b) homogenizing the plant, plant derived tissue or cultured plant cells, so as to bring into contact the fusion protein with a cellulosic matter of the plant, plant derived tissue or cultured plant cells, to

thereby effect affinity binding of the fusion protein via the cellulose binding peptide to the cellulosic matter, thereby obtaining a fusion protein cellulosic matter complex; and (c) isolating the fusion protein cellulosic matter complex.

L11 ANSWER 7 OF 30 USPATFULL

AN 2001:214879 USPATFULL

TI Vectors containing nucleic acids coding for Arabidopsis thaliana endo-1,4-.beta.-glucanase secretion signal peptide

IN Shoseyov, Oded, Karme Yosef, Israel  
Shani, Ziv, Rehovoth, Israel

PA Yissum Research Development Co., Ltd., Jerusalem, Israel (non-U.S. corporation)

PI US 6323023 B1 20011127

AI US 1999-325274 19990603 (9)

RLI Division of Ser. No. US 1998-6636, filed on 13 Jan 1998, now patented, Pat. No. US 6005092

DT Utility

FS GRANTED

EXNAM Primary Examiner: Nelson, Amy J.; Assistant Examiner: Mehta, Ashwin

LREP Pennie & Edmonds LLP

CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN 45 Drawing Figure(s); 29 Drawing Page(s)

LN.CNT 2685

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention discloses genetically engineered plants which display altered structure or morphology. The transgenic plants express a cell wall modulation transgene or gene construct that results in the altered structure or morphology. The altered structure or morphology can be associated with, for example, altered biomass, growth, yield, greater or less resistance to biodegradation, more or less digestible to ruminants, altered cellulose content, larger leaves/normal hypocotyls or smaller leaves/longer hypocotyls, etc. compared to a non-transgenic plant of the same species. The cell wall modulation transgene can be any cellulose binding domain, a cellulose binding protein, or a cell wall modifying protein or enzyme such as endoxyloglucan transferase, xyloglucan endo-transglycosylase, an expansin, cellulose synthase, or a novel isolated endo-1,4-.beta.-glucanase of Arabidopsis thaliana. The invention also discloses transgenic plants containing a gene construct comprising a promoter operably linked to the cell wall modulation protein or polypeptide gene and may further comprise a sequence encoding a secretion signal peptide. In particular, the invention discloses transgenic plants containing a gene construct comprising the cell promoter, operably linked to the cell signal peptide and any cellulose binding domain. Methods for modulating plant growth by transgenic expression of a cell wall modulating protein or polypeptide are also disclosed. The present invention also discloses a novel, isolated Arabidopsis thaliana endo-1,4-.beta.-glucanase gene (cell), its promoter (cell promoter) and polypeptide (Cell) and recombinant nucleic acid vectors containing the cell gene with or without a secretion signal peptide sequence and/or the cell promoter.

L11 ANSWER 8 OF 30 USPATFULL

AN 2001:86039 USPATFULL

TI Choline binding proteins for anti-pneumococcal vaccines

IN Masure, H. Robert, Germantown, TN, United States

Rosenow, Carsten I., New York, NY, United States

Tuomanen, Elaine, Germantown, TN, United States

Wizemann, Theresa M., Germantown, MD, United States

PA The Rockefeller University, New York, NY, United States (U.S. corporation)

PI US 6245335 B1 20010612

AI US 1997-847065 19970501 (8)

PRAI US 1996-16632P 19960501 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Mosher, Mary E.  
LREP Klauber & Jackson  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 25 Drawing Figure(s); 18 Drawing Page(s)  
LN.CNT 2933

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to bacterial choline binding proteins (CBPs) which bind choline. Such proteins are particularly desirable for vaccines against appropriate strains of Gram positive bacteria, particularly streptococcus, and more particularly pneumococcus. Also provided are DNA sequences encoding the bacterial choline binding proteins or fragment thereof, antibodies to the bacterial choline binding proteins, pharmaceutical compositions comprising the bacterial choline binding proteins, antibodies to the bacterial choline binding proteins suitable for use in passive immunization, and small molecule inhibitors of choline binding protein mediated adhesion. Methods for diagnosing the presence of the bacterial choline binding protein, or of the bacteria, are also provided. In a specific embodiment, a streptococcal choline binding protein is an enolase, which demonstrates strong affinity for fibronectin.

L11 ANSWER 9 OF 30 USPATFULL

AN 2001:71342 USPATFULL

TI Luciferases, fluorescent proteins, nucleic acids encoding the luciferases and fluorescent proteins and the use thereof in diagnostics, high throughput screening and novelty items

IN Bryan, Bruce J., 716 N. Arden Dr., Beverly Hills, CA, United States 90210

Szent-Gyorgyi, Christopher, Pittsburgh, PA, United States

PA Bryan, Bruce J., United States (U.S. individual)

Prolume, LTD, Pittsburgh, PA, United States (U.S. corporation)

PI US 6232107 B1 20010515

AI US 1999-277716 19990326 (9)

PRAI US 1998-102939P 19981001 (60)

DT Utility

FS Granted

EXNAM Primary Examiner: Achutamurthy, Ponnathapu; Assistant Examiner: Rao, Manjunath N.

LREP Seidman, StephanieHeller, Ehrman, White & Mculiffe LLP

CLMN Number of Claims: 63

ECL Exemplary Claim: 1

DRWN 14 Drawing Figure(s); 11 Drawing Page(s)

LN.CNT 6743

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Isolated and purified nucleic acid molecules that encode a luciferase from Renilla mulleri, Gaussia and Pleuromamma, and the proteins encoded thereby are provided. Isolated and purified nucleic acids encoding green fluorescent proteins from the genus Renilla and Ptilosarcus, and the green fluorescent proteins encoded thereby are also provided. Compositions and **combinations** comprising the green fluorescent proteins and/or the luciferase are further provided.

L11 ANSWER 10 OF 30 USPATFULL

AN 2001:18686 USPATFULL

TI Transgenic plants of altered morphology

IN Shoseyov, Oded, Karme Yosef, Israel

Shani, Ziv, Rehovoth, Israel

Shpigel, Etai, Kibbutz Megido, Israel

PA Yisum Research Development Company of the Hebrew University of Jerusalem, Israel (non-U.S. corporation)

PI US 6184440 B1 20010206  
AI US 1998-6632 19980113 (9)  
PRAI IL 1997-121404 19970727  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Fox, David T.; Assistant Examiner: Mehta, Ashwin D.  
LREP Pennie & Edmonds LLP  
CLMN Number of Claims: 18  
ECL Exemplary Claim: 1  
DRWN 47 Drawing Figure(s); 29 Drawing Page(s)  
LN.CNT 2852

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention discloses genetically engineered plants which display altered structure or morphology. The transgenic plants express a cell wall modulation transgene or gene construct that results in the altered structure or morphology. The altered structure or Morphology can be associated with, for example, altered biomass, growth, yield, greater or less resistance to biodegradation, more or less digestible to ruminants, altered cellulose content, larger leaves/normal hypocotyls or smaller leaves/longer hypocotyls, etc. compared to a non-transgenic plant of the same species. The cell wall modulation transgene can be any cellulose binding domain, a cellulose binding protein, or a cell wall modifying protein or enzyme such as endoxyloglucan transferase, xyloglucan endo-transglycosylase, an expansin, cellulose synthase, or a novel isolated endo-1,4-.beta.-glucanase of Arabidopsis thaliana. The invention also discloses transgenic plants containing a gene construct comprising a promoter operably linked to the cell wall modulation protein or polypeptide gene and may further comprise a sequence encoding a secretion signal peptide. In particular, the invention discloses transgenic plants containing a gene construct comprising the cell promoter, operably linked to the cell signal peptide and any cellulose binding domain. Methods for modulating plant growth by transgenic expression of a cell wall modulating protein or polypeptide are also disclosed. The present invention also discloses a novel, isolated Arabidopsis thaliana endo-1,4-.beta.-glucanase gene (cell), its promoter (cell promoter) and polypeptide (Cell) and recombinant nucleic acid vectors containing the cell gene with or without a secretion signal peptide sequence and/or the cell promoter.

L11 ANSWER 11 OF 30 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
1

AN 2001:511037 BIOSIS

DN PREV200100511037

TI Protection against Streptococcus pneumoniae elicited by immunization with pneumolysin and **CbpA**.

AU Oggunniyi, Abiodun David; Woodrow, Matthew C.; Poolman, Jan T.; Paton, James C. (1)

CS (1) Department of Molecular Biosciences, Adelaide University, Adelaide, South Australia, 5005: james.paton@adelaide.edu.au Australia

SO Infection and Immunity, (October, 2001) Vol. 69, No. 10, pp. 5997-6003. print.

ISSN: 0019-9567.

DT Article

LA English

SL English

AB The need for the development of cheap and effective vaccines against pneumococcal disease has necessitated the evaluation of common virulence-associated proteins of Streptococcus pneumoniae as potential vaccine antigens. In this study, we examined the capacity of active immunization with a genetic toxoid derivative of pneumolysin (PdB) and/or a fragment of choline binding protein A (**CbpA**; also known as PspC, Hic, and SpsA) to protect mice from intraperitoneal challenge with medium to very high doses of a highly virulent capsular type 2 pneumococcal strain, D39. The median survival times for mice immunized

with the individual protein antigens in different adjuvant combinations were significantly longer than those for mice that received the respective adjuvants alone. Mice immunized with **CbpA** alone were significantly better protected than mice immunized with **PdB** alone. Correspondingly, the median survival times for mice that were immunized with a combination of **PdB** and **CbpA** were significantly longer than those for mice that received **PdB** alone but not significantly different from those that received **CbpA** alone. Mice immunized with the protein antigens in a mixture of monophospholipid A (MPL) and aluminium phosphate (AlPO<sub>4</sub>) adjuvants had higher antibody titers than mice that received the antigens in AlPO<sub>4</sub> alone. Mice immunized with **PdB** in MPL plus AlPO<sub>4</sub> were also significantly better protected than mice that received **PdB** in AlPO<sub>4</sub> alone.

L11 ANSWER 12 OF 30 USPTAFULL

AN 2000:167756 USPTAFULL

TI Chaperone expression plasmids

IN Sogo, Kazuyo, Kyoto, Japan

Yanagi, Hideki, Takarazuka, Japan

Yura, Takashi, Kyoto, Japan

PA HSP Research Institute, Inc., Osaka, Japan (non-U.S. corporation)

PI US 6159708 20001212

AI US 1998-100110 19980619 (9)

PRAI JP 1997-180558 19970620

DT Utility

FS Granted

EXNAM Primary Examiner: Yucel, Remy

LREP Birch, Stewart, Kolasch & Birch, LLP

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 10 Drawing Figure(s); 10 Drawing Page(s)

LN.CNT 1055

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An artificial operon comprising polynucleotides encoding each of chaperones DnaK, DnaJ and GrpE; an expression plasmid carrying the operon; a cotransformant prepared by introducing the expression plasmid into E. coli together with a foreign protein expression vector; and a method for producing a foreign protein comprising using the cotransformant.

L11 ANSWER 13 OF 30 USPTAFULL

AN 2000:31563 USPTAFULL

TI Boron-containing amino carboxylic acid compounds and uses thereof

IN Kabalka, George W., Knoxville, TN, United States

Srivastava, Rajiv R., Knoxville, TN, United States

PA The University of Tennessee Research Corporation, Knoxville, TN, United States (U.S. corporation)

PI US 6037490 20000314

AI US 1997-923054 19970903 (8)

PRAI US 1996-25558P 19960903 (60)

DT Utility

FS Granted

EXNAM Primary Examiner: Geist, Gary; Assistant Examiner: Vollano, Jean F

LREP Schnader Harrison Segal & Lewis LLP, Weiser, Gerard J.

CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 3 Drawing Page(s)

LN.CNT 810

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel compounds which are useful for boron neutron capture therapy (BNCT) are disclosed. The compounds comprise a stable boron-containing group and an aminocycloalkane carboxylic acid group or a boronated acyclic hydrocarbon-linked amino carboxylic acid. Methods for synthesis of the compounds and for use of the compounds in BNCT are disclosed.



L11 ANSWER 14 OF 30 USPATFULL  
 AN 2000:19277 USPATFULL  
 TI Motion estimation and compensation of video object planes for interlaced digital video  
 IN Eifrig, Robert O., San Diego, CA, United States  
 Chen, Xuemin, San Diego, CA, United States  
 Luthra, Ajay, San Diego, CA, United States  
 PA General Instrument Corporation, Horsham, PA, United States (U.S. corporation)  
 PI US 6026195 20000215  
 AI US 1999-301141 19990428 (9)  
 RLI Division of Ser. No. US 1997-897847, filed on 21 Jul 1997  
 PRAI US 1997-40120P 19970307 (60)  
 US 1997-42245P 19970331 (60)  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Couso, Yon J.  
 LREP Lipsitz, Barry R., Hoppin, Ralph F.  
 CLMN Number of Claims: 12  
 ECL Exemplary Claim: 1  
 DRWN 14 Drawing Figure(s); 13 Drawing Page(s)  
 LN.CNT 1346  
 AB A motion estimation and compensation technique is provided for interlaced digital video such as video object planes (VOPs). Predictor motion vectors for use in differentially encoding a current field coded macroblock are obtained using the median of motion vectors of surrounding blocks or macroblocks. When a surrounding macroblock is itself interlaced coded, an average motion vector for that macroblock is used, with fractional pixel values being mapped to the half-pixel. When the current block is not interlaced coded but a surrounding block is, the field motion vectors may be used individually or averaged. In a repetitive padding technique for an interlaced coded VOP, the even and odd lines of the VOP and surrounding block are grouped. Within each field, exterior pixels are padded by setting them to the value of the nearest boundary pixel, or to an average of two boundary pixels. The lines are then reordered to provide a single padded reference VOP image.

L11 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2002 ACS  
 AN 2000:439921 CAPLUS  
 DN 133:174159  
 TI Expression, purification, and applications of staphylococcal protein A fused to cellulose-binding domain  
 AU Shpigel, Etai; Goldlust, Arie; Eshel, Adi; Ber, Idit Kaplan; Efroni, Gilat; Singer, Yossi; Levy, Ilan; Dekel, Mara; Shoseyov, Oded  
 CS The Kennedy Leigh Centre for Horticulture Research and The Otto Warburg Center for Agricultural Biotechnology, The Faculty of Agricultural, Food and Environmental Quality Sciences, The Hebrew University of Jerusalem, Rehovot, 76100, Israel  
 SO Biotechnology and Applied Biochemistry (2000), 31(3), 197-203  
 CODEN: BABIEC; ISSN: 0885-4513  
 PB Portland Press Ltd.  
 DT Journal  
 LA English  
 AB Because staphylococcal protein A (ProtA) binds specifically to IgG, it was used for many immunol. manipulations, most notably antibody purifn. and diagnostics. Immobilization is required for most of these applications. Here the authors describe a genetic-engineering approach to immobilizing ProtA on cellulose, by fusing it to cellulose-binding domain (CBD) derived from the cellulose-binding Protein A of Clostridium cellulovorans. The bifunctional fusion protein was expressed in Escherichia coli, recovered on a cellulose column and purified by elution at alk. pH. ProtA-CBD was used to purify IgG from rabbit serum and its ability to bind IgG from different sources was detd. The bifunctional chimeric protein can bind up

to 23.4 mg/mL human IgG at a ratio of 1 mol of ProtA-CBD/2 mol of human IgG, and can purify up to 11.6 mg/mL rabbit IgG from a serum. The ability to bind functionally active CBD-affinity reagents to cellulosic microtiter plates was demonstrated. The results indicate that a **combination** of CBD-affinity reagents and cellulosic microtiter plates is an attractive diagnostics matrix for the following reasons: (i) cellulose exhibits very low non-specific binding; and (ii) CBD-fusion proteins bind directly to cellulose at high d. A unique signal-amplification method was developed based on the ability of ProtA-CBD to link stained cellulose particles to primary antibody in a Western blot.

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 30 USPATFULL

AN 1999:168020 USPATFULL

TI Motion estimation and compensation of video object planes for interlaced digital video

IN Eifrig, Robert O., San Diego, CA, United States

Chen, Xuemin, San Diego, CA, United States

Luthra, Ajay, San Diego, CA, United States

PA General Instrument Corporation, Horsham, PA, United States (U.S. corporation)

PI US 6005980 19991221

AI US 1997-897847 19970721 (8)

PRAI US 1997-40120P 19970307 (60)

US 1997-42245P 19970331 (60)

DT Utility

FS Granted

EXNAM Primary Examiner: Couso, Jose L.

LREP Lipsitz, Barry R., Hoppin, Ralph F.

CLMN Number of Claims: 54

ECL Exemplary Claim: 1

DRWN 14 Drawing Figure(s); 13 Drawing Page(s)

LN.CNT 1932

AB A motion estimation and compensation technique is provided for interlaced digital video such as video object planes (VOPs). Predictor motion vectors for use in differentially encoding a current field coded macroblock are obtained using the median of motion vectors of surrounding blocks or macroblocks. When a surrounding macroblock is itself interlaced coded, an average motion vector for that macroblock is used, with fractional pixel values being mapped to the half-pixel. When the current block is not interlaced coded but a surrounding block is, the field motion vectors may be used individually or averaged. In a repetitive padding technique for an interlaced coded VOP, the even and odd lines of the VOP and surrounding block are grouped. Within each field, exterior pixels are padded by setting them to the value of the nearest boundary pixel, or to an average of two boundary pixels. The lines are then reordered to provide a single padded reference VOP image.

L11 ANSWER 17 OF 30 USPATFULL

AN 1999:167132 USPATFULL

TI Arabidopsis thaliana endo-1,4-.beta.-glucanase gene and promoter

IN Shoseyov, Oded, Karme Yosef, Israel

Shani, Ziv, Rehovoth, Israel

PA Yissum Research Development Company of the Hebrew University of Jerusalem, Israel (non-U.S. corporation)

PI US 6005092 19991221

AI US 1998-6636 19980113 (9)

PRAI IL 1997-121404 19970727

DT Utility

FS Granted

EXNAM Primary Examiner: Fox, David T.; Assistant Examiner: Mehta, Ashwin

LREP Pennie & Edmonds LLP

CLMN Number of Claims: 11

ECL Exemplary Claim: 1,9  
DRWN 32 Drawing Figure(s); 29 Drawing Page(s)  
LN.CNT 3268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention discloses genetically engineered plants which display altered structure or morphology. The transgenic plants express a cell wall modulation transgene or gene construct that results in the altered structure or morphology. The altered structure or morphology can be associated with, for example, altered biomass, growth, yield, greater or less resistance to biodegradation, more or less digestible to ruminants, altered cellulose content, larger leaves/normal hypocotyls or smaller leaves/longer hypocotyls, etc. compared to a non-transgenic plant of the same species. The cell wall modulation transgene can be any cellulose binding domain, a cellulose binding protein, or a cell wall modifying protein or enzyme such as endoxyloglucan transferase, xyloglucan endo-transglycosylase, an expansin, cellulose synthase, or a novel isolated endo-1,4-.beta.-glucanase of Arabidopsis thaliana. The invention also discloses transgenic plants containing a gene construct comprising a promoter operably linked to the cell wall modulation protein or polypeptide gene and may further comprise a sequence encoding a secretion signal peptide. In particular, the invention discloses transgenic plants containing a gene construct comprising the cell promoter, operably linked to the cell signal peptide and any cellulose binding domain. Methods for modulating plant growth by transgenic expression of a cell wall modulating protein or polypeptide are also disclosed. The present invention also discloses a novel, isolated Arabidopsis thaliana endo-1,4-.beta.-glucanase gene (cell), its promoter (cell promoter) and polypeptide (Cell) and recombinant nucleic acid vectors containing the cell gene with or without a secretion signal peptide sequence and/or the cell promoter.

L11 ANSWER 18 OF 30 USPATFULL

AN 1999:134061 USPATFULL

TI Intra-macroblock DC and AC coefficient prediction for interlaced digital video

IN Eifrig, Robert O., San Diego, CA, United States  
Chen, Xuemin, San Diego, CA, United States  
Luthra, Ajay, San Diego, CA, United States

PA General Instrument Corporation, Horsham, PA, United States (U.S. corporation)

PI US 5974184 19991026

AI US 1997-957511 19971024 (8)

PRAI US 1997-40120P 19970307 (60)

US 1997-42245P 19970331 (60)

DT Utility

FS Granted

EXNAM Primary Examiner: Tadayon, Bijan

LREP Lipsitz, Barry R., Hoppin, Ralph F.

CLMN Number of Claims: 42

ECL Exemplary Claim: 1

DRWN 10 Drawing Figure(s); 8 Drawing Page(s)

LN.CNT 1163

AB DC and AC DCT transform coefficients of an INTRA coded block are differentially encoded by selecting predictor DC and AC coefficients from a left-hand neighboring block and a top neighboring block. Each block is coded according to a frame mode, a reordered field mode, and a non-reordered field mode. The AC predictor block is selected according to the respective coding modes of the blocks, and the block in which a DC predictor resides. The top block is selected as an AC predictor when the top block and current block are both reordered field mode, or both frame mode and/or non-reordered field mode, and the DC predictor resides in the top block. Zeroed AC spatial transform coefficients are used in place of the AC spatial transform coefficients from the selected block when the selected block is not INTRA coded, or does not reside in the

same Video Object Plane (VOP) as the current block. DC coefficients may be non-linearly quantized.

L11 ANSWER 19 OF 30 USPATFULL  
AN 1999:1536 USPATFULL  
TI Methods of detection using a cellulose binding domain fusion product  
IN Shoseyov, Oded, Shimshon, Israel  
Shpiegl, Itai, North Gallilea, Israel  
Goldstein, Marc A., Davis, CA, United States  
Doi, Roy H., Davis, CA, United States  
PA Yisum Research Development Company of the Hebrew University of  
Jerusalem, Israel (non-U.S. corporation)  
The University of California, CA, United States (U.S. corporation)  
PI US 5856201 19990105  
AI US 1994-330394 19941027 (8)  
RLI Continuation-in-part of Ser. No. US 1993-48164, filed on 14 Apr 1993,  
now patented, Pat. No. US 5496934  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Fitzgerald, David L.; Assistant Examiner: Kemmerer,  
Elizabeth C.  
LREP Pennie & Edmonds LLP  
CLMN Number of Claims: 29  
ECL Exemplary Claim: 1  
DRWN 34 Drawing Figure(s); 31 Drawing Page(s)  
LN.CNT 2791  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB A cellulose binding domain (CBD) having a high affinity for crystalline  
cellulose and chitin is disclosed, along with methods for the molecular  
cloning and recombinant production thereof. Fusion products comprising  
the CBD and a second protein are likewise described. A wide range of  
applications are contemplated for both the CBD and the fusion products,  
including drug delivery, affinity separations, and diagnostic  
techniques.

L11 ANSWER 20 OF 30 USPATFULL  
AN 1998:144210 USPATFULL  
TI Cellulose binding domain proteins  
IN Shoseyov, Oded, Karmey Yosef, Israel  
Shpiegl, Itai, Rehovot, Israel  
Goldstein, Marc, Davis, CA, United States  
Doi, Roy, Davis, CA, United States  
PA Yisum Research Development Co. of Hebrew University Of Jeruslame,  
Israel (non-U.S. corporation)  
University of CA, CA, United States (U.S. corporation)  
PI US 5837814 19981117  
AI US 1995-460455 19950602 (8)  
RLI Division of Ser. No. US 1993-48164, filed on 14 Apr 1993, now patented,  
Pat. No. US 5496934  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Fitzgerald, David L.; Assistant Examiner: Kemmerer,  
Elizabeth C.  
CLMN Number of Claims: 15  
ECL Exemplary Claim: 1  
DRWN 16 Drawing Figure(s); 15 Drawing Page(s)  
LN.CNT 1983  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB A cellulose binding domain (CBD) having a high affinity for crystalline  
cellulose and chitin is disclosed, along with methods for the molecular  
cloning and recombinant production thereof. Fusion products comprising  
the CBD and a second protein are likewise described. A wide range of  
applications are contemplated for both the CBD and the fusion products,  
including drug delivery, affinity separations, and diagnostic

techniques.

L11 ANSWER 21 OF 30 USPATFULL  
AN 1998:82604 USPATFULL  
TI Immunosuppressive drug binding proteins and use  
IN Soldin, Steven J., 6335 31st St., NW., Washington, DC, United States  
20015  
PI US 5780307 19980714  
AI US 1996-686759 19960726 (8)  
RLI Continuation of Ser. No. US 1994-200404, filed on 23 Feb 1994, now  
abandoned 76 Ser. No. US 1994-224868, filed on 8 Apr 1994 which is a  
continuation of Ser. No. US -200404 which is a continuation-in-part of  
Ser. No. US 1991-782761, filed on 22 Oct 1991, now abandoned And Ser.  
No. US 1992-841792, filed on 26 Feb 1992, now abandoned which is a  
continuation-in-part of Ser. No. US 1990-521074, filed on 9 May 1990,  
now abandoned, said Ser. No. US -782761 which is a  
continuation-in-part of Ser. No. US 1990-487115, filed on 2 Mar 1990,  
now abandoned which is a continuation-in-part of Ser. No. US  
1988-279176, filed on 2 Dec 1988, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Stucker, Jeffrey  
CLMN Number of Claims: 18  
ECL Exemplary Claim: 1  
DRWN 38 Drawing Figure(s); 34 Drawing Page(s)  
LN.CNT 2374  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Purified immunosuppressive drug binding protein (immunophilin) of  
molecular weight 34-37 kDa and pI of about 6.5 is described. The 34-37  
kDa immunophilin specifically binds FK-506, rapamycin and CsA with high  
affinity. This novel immunophilin can be used as a reagent for  
capturing, detecting and quantifying immunosuppressive drugs and their  
biologically active metabolites, derivatives and analogues in tissue or  
fluid samples, and for the capturing potential immunosuppressive drugs  
from microbial extracts or culture media.

L11 ANSWER 22 OF 30 USPATFULL  
AN 1998:49678 USPATFULL  
TI Transparent block skipping in object-based video coding systems  
IN Lee, Ming-Chieh, Bellevue, WA, United States  
Chen, Wei-ge, Redmond, WA, United States  
PA Microsoft Corporation, Redmond, WA, United States (U.S. corporation)  
PI US 5748789 19980505  
AI US 1996-741949 19961031 (8)  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Boudreau, Leo; Assistant Examiner: Tadayon, Bijan  
LREP Klarquist Sparkman Campbell Leigh & Whinston LLP  
CLMN Number of Claims: 18  
ECL Exemplary Claim: 1  
DRWN 79 Drawing Figure(s); 39 Drawing Page(s)  
LN.CNT 3386  
AB A method implemented in an object-based video encoder or decoder uses  
shape information that describes the boundary of a group of pixels  
representing an object in a sequence of video frames to identify  
transparent blocks (e.g., macroblocks or blocks so that coding/decoding  
of these blocks can be skipped. In the object-based video coding method,  
encoders code shape separately from motion and texture, and shape  
information is available before the encoder/decoder codes/decodes  
texture and motion data. The encoder and decoder use this shape  
information to identify transparent macroblocks or blocks so that  
texture coding and possible motion coding can be skipped. This method  
for transparent block skipping reduces coding and decoding operations  
and reduces the number of bits needed to store a bitstream representing

a compressed video sequence.

L11 ANSWER 23 OF 30 USPATFULL  
AN 1998:39377 USPATFULL  
TI Kits and methods of detection using cellulose binding domain fusion proteins  
IN Shoseyov, Oded, Karmey Yosef, Israel  
PA Yissum Research Development Company of the Hebrew University of Jerusalem, Jerusalem, Israel (non-U.S. corporation)  
PI US 5738984 19980414  
AI US 1995-460458 19950602 (8)  
RLI Division of Ser. No. US 1993-48164, filed on 14 Apr 1993, now patented, Pat. No. US 5496934  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Scheiner, Toni R.; Assistant Examiner: Ungar, Susan  
LREP Pennie & Edmonds  
CLMN Number of Claims: 36  
ECL Exemplary Claim: 1  
DRWN 16 Drawing Figure(s); 13 Drawing Page(s)  
LN.CNT 2153  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB A cellulose binding domain (CBD) having a high affinity for crystalline cellulose and chitin is disclosed, along with methods for the molecular cloning and recombinant production thereof. Fusion products comprising the CBD and a second protein are likewise described. A wide range of applications are contemplated for both the CBD and the fusion products, including drug delivery, affinity separations, and diagnostic techniques.

L11 ANSWER 24 OF 30 USPATFULL  
AN 1998:17210 USPATFULL  
TI Cellulose binding domain fusion proteins  
IN Shoseyov, Oded, Karmey Yosef, Israel  
Shpiegl, Itai, Rehovot, Israel  
Goldstein, Marc A., Davis, CA, United States  
Doi, Roy H., Davis, CA, United States  
PA Yissum Research Development Company of the Hebrew University of Jerusalem, Israel (non-U.S. corporation)  
Regents of the University of California, CA, United States (U.S. corporation)  
PI US 5719044 19980217  
AI US 1995-460457 19950602 (8)  
RLI Division of Ser. No. US 1993-48164, filed on 14 Apr 1993, now patented, Pat. No. US 5496934  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Jagannathan, Vasu S.; Assistant Examiner: Kemmerer, Elizabeth C.  
LREP Pennie & Edmonds  
CLMN Number of Claims: 34  
ECL Exemplary Claim: 1  
DRWN 16 Drawing Figure(s); 13 Drawing Page(s)  
LN.CNT 2043  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB A cellulose binding domain (CBD) having a high affinity for crystalline cellulose and chitin is disclosed, along with methods for the molecular cloning and recombinant production thereof. Fusion products comprising the CBD and a second protein are likewise described. A wide range of applications are contemplated for both the CBD and the fusion products, including drug delivery, affinity separations, and diagnostic techniques.

L11 ANSWER 25 OF 30 USPATFULL

AN 97:117940 USPATFULL  
TI Immunosuppressive drug binding proteins and use  
IN Soldin, Steven J., 6335 31st St., NW., Washington, DC, United States  
20015  
PI US 5698448 19971216  
AI US 1994-224868 19940408 (8)  
RLI Continuation of Ser. No. US 1994-200404, filed on 23 Feb 1994, now  
abandoned which is a continuation-in-part of Ser. No. US 1991-782761,  
filed on 22 Oct 1991, now abandoned which is a continuation-in-part of  
Ser. No. US 1990-487115, filed on 2 Mar 1990, now abandoned which is a  
continuation-in-part of Ser. No. US 1988-279176, filed on 2 Dec 1988,  
now abandoned, said Ser. No. US -200404 which is a  
continuation-in-part of Ser. No. US 1992-841792, filed on 26 Feb 1992,  
now abandoned which is a continuation-in-part of Ser. No. US  
1990-521074, filed on 9 May 1990, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Nucker, Christine M.; Assistant Examiner: Stucker,  
Jeffrey  
LREP Foley & Lardner  
CLMN Number of Claims: 25  
ECL Exemplary Claim: 1  
DRWN 35 Drawing Figure(s); 31 Drawing Page(s)  
LN.CNT 2277

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Purified immunosuppressive drug binding proteins (immunophilins) of  
molecular mass 2.4-3.0 kDa, 4.5 kDa, 34-37 kDa, 50-54 kDa, 80-100 kDa,  
and greater than about 120 kDa are described. The 34-37 kDa immunophilin  
specifically binds FK-506 and rapamycin. The 50-54 kDa immunophilin  
specifically binds FK-506, rapamycin and cyclosporine A, but with  
binding site distinctions. The 50-54 kDa immunophilin is devoid of  
significant rotomase activity, but inhibits cAMP-activated protein  
kinase activity. The amino acid composition, and the sequences of a  
dodecameric amino acid C-terminus partial sequence and of two heptameric  
internal partial amino acid sequences, of the 50-54 kDa immunophilin are  
described; the deduced molecular weight is 52,171. Recombinant about 52  
kDa immunophilin is also described. These novel immunophilins can be  
used as reagents for the detection, quantification and capture of  
immunosuppressive drugs and their biologically active metabolites,  
derivatives and analogues in fluid samples, and for the capture of  
potential immunosuppressive drugs from microbial extracts or culture  
media or from mammalian body fluids and tissues.

L11 ANSWER 26 OF 30 USPATFULL

AN 97:86729 USPATFULL  
TI Methods of use of cellulose binding domain proteins  
IN Shoseyov, Oded, Karmey Yosef, Israel  
Shpiegl, Itai, Rehovot, Israel  
Goldstein, Marc A., Davis, CA, United States  
Doi, Roy H., Davis, CA, United States  
PA Yissum Research Development Company of the Hebrew University of  
Jerusalem, Israel (non-U.S. corporation)  
The University of California, CA, United States (U.S. corporation)  
PI US 5670623 19970923  
AI US 1995-460462 19950602 (8)  
RLI Division of Ser. No. US 1994-48164, filed on 14 Apr 1994, now patented,  
Pat. No. US 5496934  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Robinson, Douglas W.; Assistant Examiner: Gupta, Anish  
LREP Pennie & Edmonds  
CLMN Number of Claims: 19  
ECL Exemplary Claim: 1  
DRWN 16 Drawing Figure(s); 15 Drawing Page(s)

LN.CNT 2091

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cellulose binding domain (CBD) having a high affinity for crystalline cellulose and chitin is disclosed, along with methods for the molecular cloning and recombinant production thereof. Fusion products comprising the CBD and a second protein are likewise described. A wide range of applications are contemplated for both the CBD and the fusion products, including drug delivery, affinity separations, and diagnostic techniques.

L11 ANSWER 27 OF 30 USPATFULL

AN 96:19207 USPATFULL

TI Nucleic acids encoding a cellulose binding domain

IN Shoseyov, Oded, Karmey Yosef, Israel

Shpiegl, Itai, Rehovot, Israel

Goldstein, Marc A., Davis, CA, United States

Doi, Roy H., Davis, CA, United States

PA Yisum Research Development Company of the Hebrew University of Jerusalem, Israel (non-U.S. corporation)

The Regents of the University of California, CA, United States (U.S. corporation)

PI US 5496934 19960305

AI US 1993-48164 19930414 (8)

DT Utility

FS Granted

EXNAM Primary Examiner: Allen, Marianne P.; Assistant Examiner: Kemmerer, Elizabeth C.

LREP Pennie & Edmonds

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 15 Drawing Figure(s); 13 Drawing Page(s)

LN.CNT 1985

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cellulose binding domain (CBD) having a high affinity for crystalline cellulose and chitin is disclosed, along with methods for the molecular cloning and recombinant production thereof. Fusion products comprising the CBD and a second protein are likewise described. A wide range of applications are contemplated for both the CBD and the fusion products, including drug delivery, affinity separations, and diagnostic techniques.

L11 ANSWER 28 OF 30 USPATFULL

AN 95:101213 USPATFULL

TI Carboranyl uridines and their use in boron neutron capture therapy

IN Soloway, Albert H., Worthington, OH, United States

Barth, Rolf F., Columbus, OH, United States

Anisuzzaman, Abul K., Westerville, OH, United States

Tjarks, Werner, Bremen, Germany, Federal Republic of

Rong, Feng-Guang, Columbus, OH, United States

Wyzlic, Iwona M., Columbus, OH, United States

PA The Ohio State University Research Foundation, Columbus, OH, United States (U.S. corporation)

PI US 5466679 19951114

AI US 1994-206750 19940307 (8)

RLI Continuation of Ser. No. US 1993-63913, filed on 17 May 1993, now abandoned

DT Utility

FS Granted

EXNAM Primary Examiner: Robinson, Douglas W.; Assistant Examiner: Wilson, James O.

LREP Foster, Frank H.

CLMN Number of Claims: 10

ECL Exemplary Claim: 1,4

DRWN No Drawings



LN.CNT 497

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to novel boron-containing nucleosides and amino acids which can utilize the enzymatic systems in tumor cells for incorporating such boron-containing structures into nucleic acids and proteins. Subsequent use of boron neutron capture therapy provides a method for treating tumor cells.

L11 ANSWER 29 OF 30 CAPLUS COPYRIGHT 2002 ACS

AN 1990:73100 CAPLUS

DN 112:73100

TI Construction and applications of DNA probes for detection of polychlorinated biphenyl-degrading genotypes in toxic organic-contaminated soil environments

AU Walia, S.; Khan, A.; Rosenthal, N.

CS Dep. Biol. Sci., Oakland Univ., Rochester, MI, 48309-4411, USA

SO Appl. Environ. Microbiol. (1990), 56(1), 254-9

CODEN: AEMIDF; ISSN: 0099-2240

DT Journal

LA English

AB Several DNA probes for polychlorinated biphenyl (PCB)-degrading genotypes were constructed from PCB-degrading bacteria. These lab.-engineered DNA probes were used for the detection, enumeration, and isolation of specific bacteria degrading PCBs. Dot blot anal. of purified DNA from toxic org. chem.-contaminated soil bacterial communities showed pos. DNA-DNA hybridization with a 32P-labeled DNA probe (pAW6194, cbpABCD). Less than 1% of bacterial colonies isolated from garden topsoil and >80% of bacteria isolated from PCB-contaminated soils showed DNA homologies with 32P-labeled DNA probes. Some of the PCB-degrading bacterial isolates detected by the DNA probe method did not show biphenyl clearance. The DNA probe method was found to detect addnl. organisms with greater genetic potential to degrade PCBs than the biphenyl clearance method did. Results from this study demonstrate the usefulness of DNA probes in detecting specific PCB-degrading bacteria, abundance of PCB-degrading genotypes, and genotypic diversity among PCB-degrading bacteria in toxic chem.-polluted soil environments. It is suggested that the DNA probe should be used with caution for accurate assessment of PCB-degradative capacity within soils and a **combination** of DNA probe and biodegrdn. assay be used to det. the abundance of PCB-degrading bacteria in the soil bacterial community.

L11 ANSWER 30 OF 30 USPATFULL

AN 80:32939 USPATFULL

TI Herbicide

IN Thiele, Kurt, Zofingen, Switzerland

Ahmed, Quazi, Zofingen, Switzerland

Scharen, Walter, Vordemwald, Switzerland

Meyer, Jacques, Zofingen, Switzerland

PA Siegfried AG, Zofingen, Switzerland (non-U.S. corporation)

PI US 4211551 19800708

AI US 1977-850468 19771110 (5)

PRAI CH 1976-14340 19761115

DT Utility

FS Granted

EXNAM Primary Examiner: Mills, Catherine L.

LREP Kleeman, Werner W.

CLMN Number of Claims: 1

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 375

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Herbicidal compositions for selective weed control comprising 4-(4'-chlorobenzyl)-phenoxy acetic acid or a salt thereof and the novel salts of 4-(4'-chlorobenzyl)-phenoxy acetic acid.

A method for selectively controlling weeds by applying to a crop area an effective amount of 4-(4'-chlorobenzyl)-phenoxy acetic acid or a salt of said acid.

=>